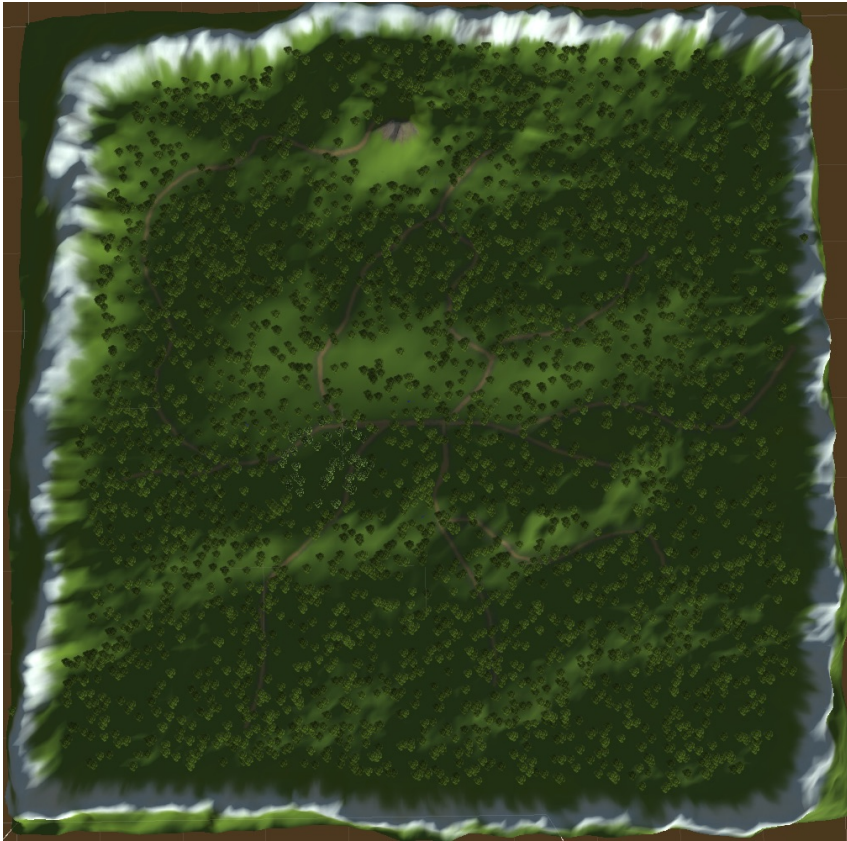# CSC3231 Coursework Alien Planet
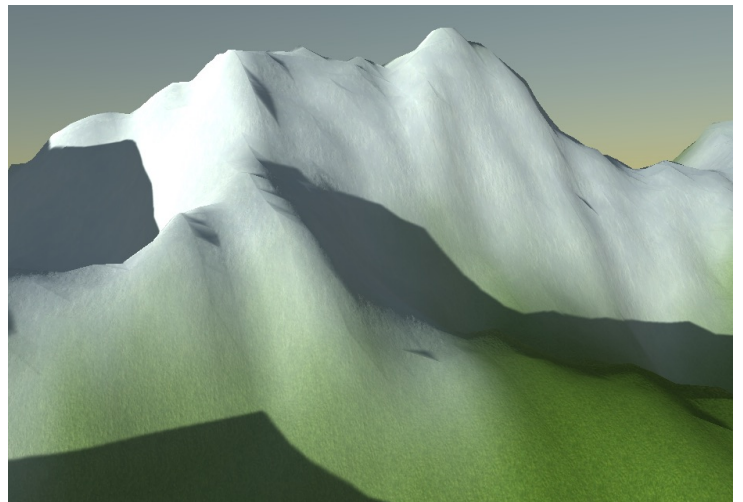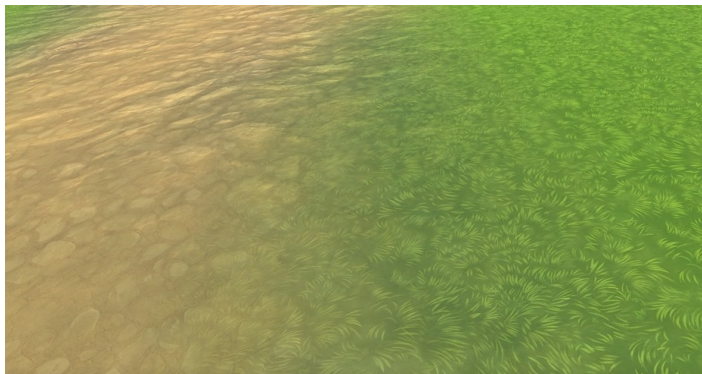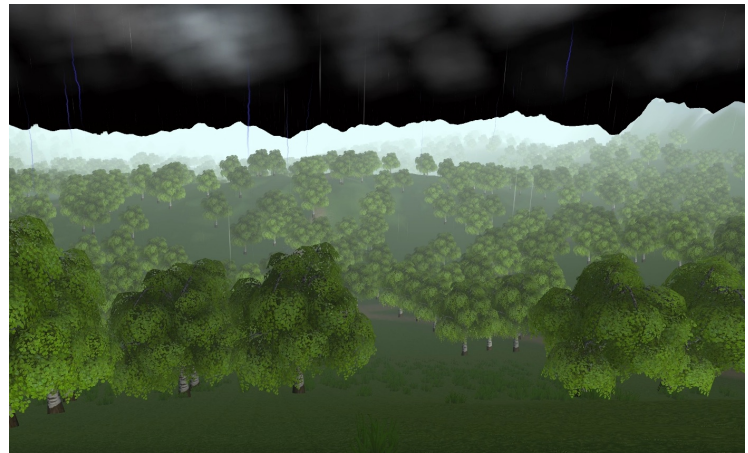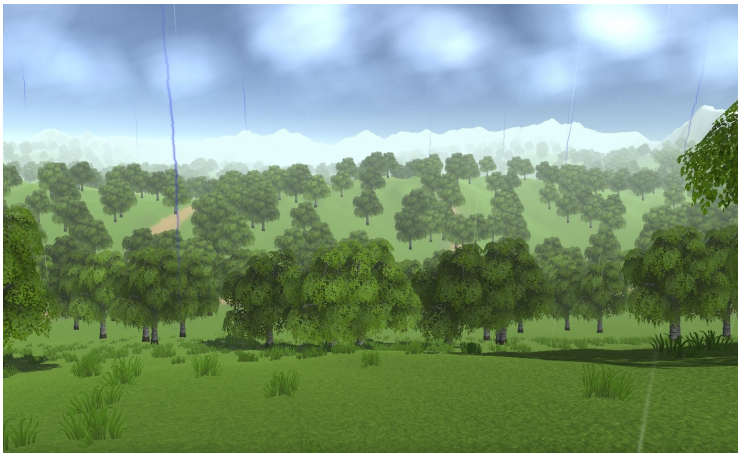

1)   This is a terrain that I created for my forest planet surface by using Terrain Tool (Unity Technology, 2020) package in unity. It contains mountains, hills and paths.

2) The planet surface was painted by 5 textures through Terrain Tool: Grass ground, road dirt ground, rock, snow and scree. All the textures were created from Fantasy Landscape Asset (Pxitiger, 2020) and Terrain Tools Sample Asset Pack (Unity Technology, 2019).
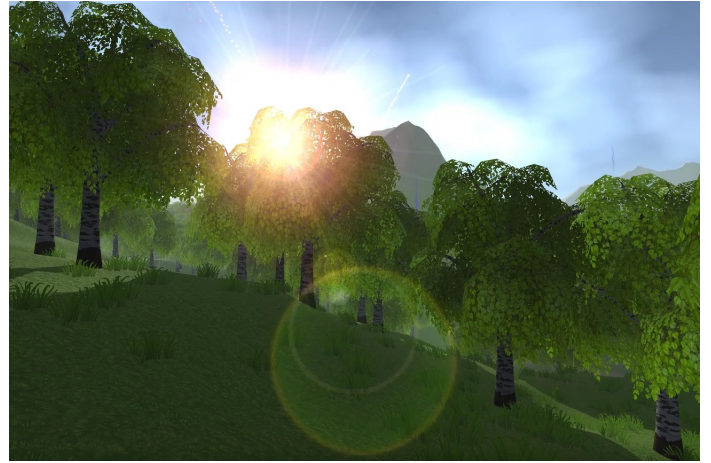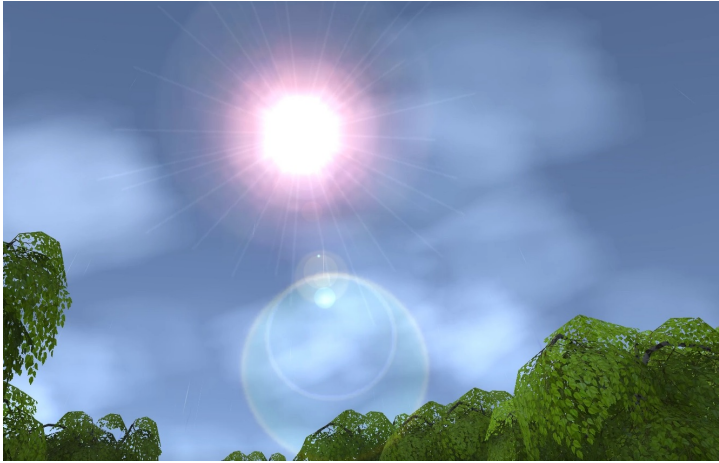
3) The trees and grasses were used from Fantasy Landscape Asset (Pxitiger, 2020). I created a wind effect by using windzone in order to move the trees and grasses in real-time.

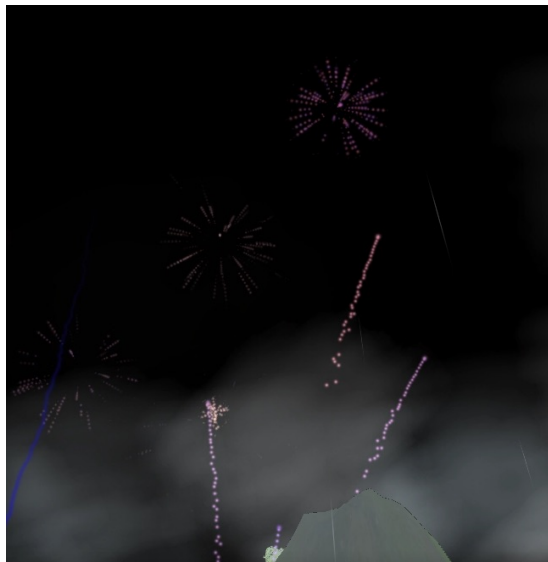4) A Day and Night cycle were controlled by a light animation. I rotated the sun from 0 degree on daytime to 360 degree on nighttime. The whole planet contains different weather effects, such as raining, lightning, foggy and cloudy. All of these effects were created by Particle System in unity.

5) The lightning on the planet is a scene hierarchy. When the lightning hits the ground, it creates sparks moving around the air.

6) This is a lens flare when camera faces the sun. I created a Flare layer on the camera and imported a 50mmZoom light flare from Standard Assets (Unity Technology, 2020)into directional light.

7) I created some firework lights in the sky by using Particle System. All the elements move and rotate in the sky.

Reference

1. Unity Technologies.(2020) *Terrain Tools*. Available at: https://docs.unity3d.com/Packages/com.unity.terrain-tools@3.0/manual/index.html (Accessed: 7th Dec 2021)

2. Pxitiger.(2020) *Fantasy landscape*. Available at: https://assetstore.unity.com/packages/3d/environments/fantasy-landscape-103573#publisher (Accessed: 7th Dec 2021)

3. Unity Technologies.(2020) *Standard Assets*. Available at: https://assetstore.unity.com/packages/essentials/asset-packs/standard-assets-for-unity-2018-4-32351#description (Accessed: 7th Dec 2021)

4. Unity Technologies.(2019) *Terrain Tools Sample Asset Pack*. Available at: https://assetstore.unity.com/packages/2d/textures-materials/nature/terrain-tools-sample-asset-pack-145808 (Accessed: 7th Dec 2021)

YouTube Link

https://www.youtube.com/watch?v=IwAz8Jd5nSc